

CLAIMS (AS AMENDED)

What is claimed is:

1. (Presently Amended) A computerized method of generating and rendering over a digital communications network a perspective view <u>image</u> of an <u>three-dimensional</u> object that can exist in the real world located within, surrounding, or in front of, a three-dimensional scene that can also exist in the real world, the method of presenting a perspective <u>view</u> image of an <u>3D</u> object in a 3D scene comprising:

producing at a first computer upon a digital communications network

- (1a) a 3D model of the background, or, equivalently, (1b) precursors of the 3D background model, or, equivalently, (1c) one or more related 2D views of the background scene suitable to serve as precursors of the 3D background model,
- (2) <u>for (1b) and (1c)</u> associated dimensional information of the particular 3D scene, and
- (3) a selected suitably-real-world object <u>positioned</u> and <u>oriented in the background scene</u>; and

transmitting from the first computer upon the digital communications network the information (1)-(3);

receiving at another, second, computer upon the digital communications network the information (1)-(3);

deriving in the second computer <u>if not transmitted from the</u> <u>first computer</u> (4) a 3D background model of the represented and selected 3D background scene; and

combining utilizing in the second computer the information (1)-(3) and the (4) derived 3D background scene model to assemble generate and render in consideration of (5) a camera location and orientation, and object-based rules as to how the selected 3D object exists within the 3D scene, to produce (6) a 3D perspective view image of the selected object properly scaled, located and oriented relative to in the 3D scene; and then

transmitting from the second computer upon the digital communications network the (6) perspective view <u>image</u>; and

receiving at the first computer upon the digital communications network this (6) perspective view image; and

displaying at the first computer this (6) perspective view image;

wherein, given a particular 3D scene with which is associated a 3D mode, and a selected object with which is associated a selected 3D model, and location of the 3D object within the 3D scene, permits generation of a 3D perspective view of the selected suitably-real-world 3D object, properly scaled, within the selected suitably-real-world 3D scene;

wherein the object, having an associated geometry, is rendered in proper (1) scale, (2) position and (3) rotation within the perspective view image;

wherein the entire computer-generated perspective view image is rendered and viewed with the same proper perspective that a conventional photo of the same scene would exhibit, if captured by a camera; and

wherein image selection object selection, placement and orientation in the scene made interactively over a digital network transpiring entirely in 2D supports the generation of a perspective view image having proper perspective showing a \underline{n} 3D object located and oriented within a 3D scene.

2. (Presently Amended) The method according to claim 1 exercised to the purpose that a prospective purchaser of the suitably-real-world 3D object may be rendered a 3D perspective proper perspective view image of an 3D object that is virtual located within the suitably-real-world 3D scene,

wherein if the object and/or the scene shown in the perspective view <u>image</u> do not actually exist, either or both object and scene could so exist.

3. (Presently Amended) The method according to claim 1

wherein the (3) suitably-real-world 3D object is selected in the form of a 2D iconic image, the 2D iconic image representing an associated object that is the selected suitably-real-world 3D object.

4. (Presently Amended) The method according to claim 3

wherein the <u>2D</u> ic<u>onic image</u> is electively placed and rotated at the first computer to produce (3a) placement and rotational information regarding where and at what positional attitude the selected object is to be placed within the selected 3D scene; and

wherein the combining in the second computer of the information (1)-(3) and the (4) derived 3D background scene model to assemble in consideration of (5) object-based rules as to how the selected 3D object exists within the 3D scene, is further in consideration of the (3a) placement and rotational information, to produce (6) the 3D perspective view image of the selected object properly scaled, located and oriented relative to the 3D scene.

5. (Presently Amended) The method according to claim 1 wherein the producing at the first computer is further of (3a) a 3D model of the selected suitably-real-world object that is itself either 2D or 3D; and

wherein the <u>combining utilizing</u> in the second computer is further of the (3a) 3D model of the selected suitably real-world <u>3D</u> object to produce the (6) 3D perspective view <u>image</u>;

wherein the model of the selected suitably-real-world <u>2D or</u> <u>3D</u> object originates at the first computer.

- 6. (Presently Amended) The method according to claim 5 1 wherein the model originated at the first computer is of an object not for sale utilizing is further in consideration of (5a) scene lighting.
- 7. (Presently Amended) The method according to claim 1

wherein the combining utilizing in the second computer is further of a (4a) a 3D model of the selected suitably real-world 3D object that is itself either 2D or 3D to produce the (6) 3D perspective view image.

wherein the $\underline{\text{3D}}$ model of the selected suitably-real-world object originates at the second computer.

- 8. (Original) The method according to claim 6 wherein the model originated at the second computer is of an object for sale.
- 9. (Presently Amended) The method according to claim 1
 wherein the producing at the first computer is further of
 (3a) placement and rotational information regarding where and at
 what positional attitude the selected object is to be placed
 within the selected 3D scene; and

wherein the combining utilizing in the second computer of the information (1)-(3) and the (4) derived 3D background scene model to assemble in consideration of (5) object-based rules as to how the selected 3D object exists within the 3D scene, is further in consideration of the (3a) placement and rotational information, to produce (6) the 3D perspective view image of the selected object properly scaled, located and oriented relative to the 3D scene;

wherein the placement and rotation information originates at the first computer.

- 10. (Presently Amended) The method according to claim 9 wherein the placement and rotation information originating at the first computer concerns location and attitude of furnishings or architectural components or improvements within a room the 3D scene.
- 11. (Presently Amended) The method according to claim 1

wherein the combining in the second computer of the information (1)-(3) and the (4) derived 3D background scene model is further of (4a) placement and rotational information in order to assemble generate in consideration of (5) object-based rules as to how the selected 3D object exists within the 3D scene, and so as to produce (6) the 3D perspective view image, having a perspective that is proper and accurate in camera location, orientation and lens focal length, of the selected object properly scaled, located and oriented relative to the 3D scene;

wherein the placement and rotation information originates at the second computer.

- 12. (Presently Amended) The method according to claim 10 wherein the placement and rotation information originating at the second computer concerns location and attitude of eyeglasses upon a head suitably-real-world object is a 2D object drawn from the group consisting of wall coverings including paint and wallpaper, and floor coverings including carpet and tile.
- 13. (Presently Amended) A computerized method of generating and rendering over a digital communications network a perspective view image of a \underline{n} three-dimensional object that can exist in the real world located within a three-dimensional space that can also exist in the real world, the method of presenting a perspective view \underline{image} of an $\underline{3D}$ object in a 3D space comprising:

generating at a client computer upon a digital communications network

- (I) one or more 2D images representing an associated particular suitably-real-world 3D scene in which 3D scene a suitably-real-world 3D object can exist,
- (ii) associated dimensional information of the particular 3D scene as appears within a particular 2D image,

- (iii) a selected 2D iconic image representing an associated selected suitably-real-world 3D object, and
- (iv) placement and rotational information regarding where and at what positional attitude the selected 3D object represented by the selected iconic image is to be placed within the selected 3D scene;

transmitting from the first computer upon the digital communications network the information (I)-(iv);

receiving at another, second, computer upon the digital communications network the information (I)-(iv);

- $% \left(v\right) =0$ (v) a photographically or virtually derived 3D model of the represented and selected 3D scene,
- (vi) a 3D model of the selected 3D object that is represented by the selected 2D iconic image, and
- (vii) object-based rules as to how the $3\mathcal{D}$ object exists within the 3D scene, in order to generate in this second computer
- (viii) a 3D perspective view \underline{image} of the $3\overline{D}$ object \underline{in} properly perspective scaled, located and oriented within the 3D scene; and then

transmitting from the second computer upon the digital communications network the (viii) perspective view <u>image</u>; and

receiving at the first computer upon the digital communications network this (viii) perspective view image; and

displaying at the first computer this (viii) perspective view image;

wherein, given a particular 3D scene, selection of an iconic image with which is associated a selected 3D model, and location of the 3D object within the 3D scene, permits generation of a 3D perspective view image of the selected suitably-real-world 3D object, in properly perspective scaled within the selected suitably-real-world 3D scene;

wherein image selection made interactively over a digital network transpiring entirely in 2D supports the generation of a

3D perspective view image of proper perspective showing an 3D object located and oriented within a 3D scene.

14. (Presently Amended) The method according to claim 13
exercised to the purpose that a prospective purchaser of
the suitably-real-world 3D object may be rendered a 3D
perspective view image of an 3D object that is virtual within
the suitably-real-world 3D scene,

wherein if the object and/or the scene shown in the perspective view \underline{image} do not actually exist, either or both object and scene could so exist.

15. (Presently Amended) The method according to claim 14
wherein the combining utilizing is of (I) a particular 2D
image representing a room, and (iii) a selected 2D icon
representing a room furnishing or architectural component or
improvement, with (v) a 3D model of the room, (vi) a 3D model of
the furnishing or architectural component or improvement, and
(vii) object-based rules to the effect that the furnishing or
architectural component or improvement is upon a floor, a wall
or a ceiling of the room, in order to generate (viii) a 3D
perspective view image of the room furnishing or architectural
component or improvement properly located and oriented within
the room;

wherein a prospective purchaser of the real-world room furnishing or architectural component or improvement may be rendered a perspective view <u>image</u> of a suitably-real-world room furnishing or architectural component or improvement properly located and oriented within a real-world room.

16. (Presently Amended) The method according to claim 15

wherein the suitably-real-world room furnishing or

architectural component or improvement rendered in 3D

perspective view image already exists in the world, and can be ordered by the prospective purchaser.

- 17. (Presently Amended) The method according to claim 15

 wherein the suitably-real-world room furnishing or

 architectural component or improvement rendered in 3D

 perspective view image does not yet exist in the world, and must be built when ordered by the prospective purchaser.
- 18. (Presently Amended) The method according to claim 14 wherein the combining utilizing is of (I) a particular 2D image representing a human head, and (iii) a selected 2D icon representing eyeglasses, with (v) a 3D model of the human head, (vi) a 3D model of the eyeglasses, and (vii) object-based rules to the effect that temple pieces of the eyeglasses slip over ears of the human head that is the subject of the 3D model while each lens of the eyeglasses is centered in front of an eye of the human head, in order to generate (viii) a 3D perspective view image of the eyeglasses properly located and oriented upon

wherein a prospective purchaser of the real-world eyeglasses may be rendered a perspective view <u>image</u> of the eyeglasses properly located and oriented upon, and fitted to, the purchaser's own human head.

and fitted to the human head;

- 19. (Presently Amended) The method according to claim 18 wherein the suitably-real-world eyeglasses rendered in 3D perspective view <u>image</u> already exist in the world, and can be ordered by the prospective purchaser.
- 20. (Presently Amended) The method according to claim 15 wherein the suitably-real-world room eyeglasses rendered in 3D perspective view <u>image</u> do not yet exist in the world, and must be built when ordered by the prospective purchaser.
- 21. (Presently Amended) The method according to claim 13 performed interactively between a server computer and a client computer upon a digital communications network, the method further comprising:

communicating from the server computer upon a digital communications network to a client a plurality of <u>2D</u> iconic images of suitably-real-world objects;

selecting at the client computer (iii) a selected 2D iconic image from among the plurality of images as does correspond to a selected suitably-real-world object;

sizing and placing at the client computer the selected icon within the selected real-world 2D scene image;

communicating from a client computer to the server computer upon a digital communications network (I) a 2D image of a suitably-real-world space scene, and (iii) the sized and placed selected <u>2D</u> iconic image within the <u>selected</u> suitably-real-world 2D scene image;

generating, at the server computer from (v) the a 3D model of the selected suitably-real-world space and (vi) the 3D model of the suitably-real-world object and the object-based rules, a (viii) 3D perspective view image of the suitably-real-world object properly located and oriented within the selected suitably-real-world space, the perspective view image being proper in each of scene lighting, camera location and orientation, and camera lens parameters; and

communicating from the server computer upon the digital communications network (viii) the generated 3D perspective view <u>image</u> to the client computer; and

displaying at the client computer (viii) the generated $\frac{3D}{2}$ perspective view \underline{image} ;

wherein from (viii) this 3D perspective view image the suitably-real-world object properly located and oriented within the suitably-real-world space may be observed, and may be so observed in a perspective view image that is proper in each of scene lighting, camera location and orientation, and camera lens parameters.

22. (Presently Amended) An interactive method of promoting and selling real-world objects comprising:

originating at a server upon a digital communications network

- (1) a first plurality of 2D images depicting real-world 3D scenes,
- (2) a second plurality of 2D images depicting realworld 3D objects,
- (3) a third plurality of 2D icons corresponding to the second plurality of 2D images depicting real-world 3D objects,
- (4) a fourth plurality of 3D models corresponding to those 3D spaces that are depicted within the first plurality of 2D images,
- (5) a fifth plurality of 3D models corresponding to the 3D objects that are depicted within the second plurality of 2D images, and
 - (6) a sixth plurality of object-based rules;

first communicating from the server upon a digital communications network to a client the (1) first plurality of 2D images of real-world 3D spaces, the (2) second plurality of 2D images of real-world 3D objects, and the (3) third plurality of 2D icons corresponding to the second plurality of 2D images of real-world 3D objects;

selecting at the client a (1a) selected real-world 2D scene image from among the (1) first plurality of 2D images, and a (3a) selected 2D icon from among the (3) third plurality of 2D icons which (3a) selected 2D icon does correspond to a (2a) selected 2D object image from among the (2) second plurality of 2D object images;

sizing and placing at the client the (3a) selected 2D icon within the (1a) selected real-world 2D scene image;

second communicating from the client upon the digital communications network to the server the sized and placed (3a) selected 2D icon within the (1a) selected real-world 2D scene image;

selecting at the server from among the (4) fourth plurality of 3D models a (4a) 3D model of the real-world space corresponding to the (1a) selected real-world 2D scene image,

and from the (5) fifth plurality of 3D models a (5a) 3D model of the real-world 3D object;

generating at the server from the (4a) 3D model of the real-world space, the (5a) 3D model of the real-world object and (6) plurality of object-based rules, (7) imaqe of perspective view a (7a) 3D real-world corresponding to the (3a) selected icon properly located and oriented relative to a (7b) 3D real-world space corresponding to selected real-world 2D scene image perspective view image being proper in each of scene lighting, camera location and orientation, and camera lens parameters; and

third communicating from the server upon the digital communications network to the client the generated (7) static perspective view <u>image</u>;

wherein from this third-communicated (7) static perspective view <u>image</u> the (7a) 3D real-world object properly located and oriented relative to the (7b) 3D real-world space may be observed at the client; and

fourth communicating from the client upon the digital communications network to the server a sales order to physically provide a real specimen of the (7a) 3D real-world object;

wherein obtaining the sales order for the (7a) 3D real-world object is promoted by the (7) static perspective view image showing at the client the (7a) 3D real-world object properly located and oriented relative to the (7b) 3D real-world space.

23. (Presently Amended) The interactive method for selling real-world objects according to claim 22 exercised for the purpose of selling furnishings or architectural components or improvements wherein

the originating at a server is of (1) a first plurality of 2D images depicting rooms, (2) a second plurality of 2D images depicting furnishings or architectural components or improvements, (3) a third plurality of icons corresponding to the second plurality of furnishing or architectural component or

improvement images, (4) a fourth plurality of 3D models corresponding to the rooms that are depicted within first plurality of 2D room images, (5) a fifth plurality of 3D models corresponding to the furnishings or architectural components or improvements that are depicted within second plurality of 2D furnishing or architectural component or improvement images, and (6) a sixth plurality of rules regarding how furnishings or architectural components or improvements fit within rooms;

the first communicating from the server upon a digital communications network to the client is of (1) the first plurality of 2D room images, (2) the second plurality of 2D furnishing or architectural component or improvement images, and (3) the third plurality of furnishings or architectural components or improvements icons;

the selecting at the client is of a (1a) selected real-world 2D room image from among the (1) first plurality of room images, and

(3a) a selected furnishing or architectural component or improvement icon from among the (3) third plurality of furnishing or architectural component or improvement icons, which (3a) selected furnishing or architectural component or improvement icon does correspond to (2a) a selected furnishing or architectural component or improvement image from among the (2) second plurality of furnishing or architectural component or improvement images;

the sizing and placing at the client is of the (3a) selected furnishing or architectural component or improvement icon within the (1a) selected 2D room image;

the second communicating from the client upon the digital communications network to the server is of the sized and placed (3a) selected furnishing or architectural component or improvement icon within the (1a) selected 2D room image;

the selecting at the server from among the (4) fourth plurality of 3D models is of a (4a) 3D model of the room corresponding to the (1a) selected 2D room image, and from the (5) fifth plurality of 3D models a (5a) 3D model of the

furnishing or architectural component or improvement corresponding to the (3a) selected furnishing or architectural component or improvement icon;

the generating at the server from the (4a) 3D room model, the (5a) 3D furnishing or architectural component or improvement model and the (6) plurality of furnishing or architectural component or improvement rules, is of a (7) static perspective view image of a (7a) 3D furnishing or architectural component or improvement corresponding to the (3a) selected furnishing or architectural component or improvement icon properly located and oriented within a (7b) 3D room corresponding to the (1a) selected 2D room image; and

the third communicating from the server upon the digital communications network to the client is of the generated (7) static perspective view <u>image</u>;

wherein from this third-communicated (7) static perspective view <u>image</u> the (7a) 3D furnishing <u>or architectural component or improvement</u> properly located and oriented within the (7b) 3D room may be observed at the client; and

the fourth communicating from the client upon the digital communications network to the server is of a sales order to physically provide a real specimen of the (7a) 3D furnishing or architectural component or improvement;

wherein obtaining the sales order for the (7a) 3D furnishing or architectural component or improvement is promoted by the (7) static perspective view <u>image</u> showing at the client the (7a) 3D furnishing or architectural component or improvement properly located and oriented within the (7b) 3D room.

24. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 22

wherein at least one of the server's first, second, third and fifth pluralities is proprietary.

25. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 24

wherein all of the server's first, second, third and fifth pluralities are proprietary.

26. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 24 further comprising:

wherein the originating at a server is further of (8) a set of available lighting effects;

wherein the first communicating from the server upon a digital communications network to the client is further of the (8) set of available lighting effects;

wherein the selecting at the client is further of a (8a) selected lighting effect from among the (8) set of lighting effects;

wherein the second communicating from the client upon the digital communications network to the server is further of the (8a) selected lighting effect;

wherein the generating at the server is further of the (7) static perspective view <u>image</u> as illuminated by the (8a) selected lighting effect; and

wherein the third communicating from the server upon the digital communications network to the client is of the generated (7) static perspective view <u>image</u> as illuminated by the (8a) selected lighting effect.

27. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 26

wherein the selecting is performed by an interior designer at the client.

28. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 24 further comprising:

wherein the originating at a server is further of (9) a set of available textures and colors;

wherein the first communicating from the server upon a digital communications network to the client is further of the (9) set of available textures and colors;

wherein the selecting at the client is further of a (9a) selected textures and colors from among the (9) set of textures and colors;

wherein the second communicating from the client upon the digital communications network to the server is further of the (9a) selected textures and colors;

wherein the generating at the server is further of the (7) static perspective view <u>image</u> as textured and colored by the (8a) selected textures and colors; and

wherein the third communicating from the server upon the digital communications network to the client is of the generated (7) static perspective view <u>image</u> as textured and colored by the (8a) selected textures and colors.

29. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 28

wherein the selecting is performed by an interior designer at the client.

30. (Presently Amended) The furnishings <u>or architectural</u> <u>components or improvements</u> sales method according to claim 28

wherein the image generation system produces a 2D virtual image of the room where all textures are scaled and oriented to the three-dimensional objects in which the textures appear.

31. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 24

wherein the selecting is performed by an interior designer at the client.

32. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 30 that, between the third communicating and the fourth communicating, further comprises:

fifth communicating upon the digital communications network from a person who is an interior designer <u>located</u> at the client to the server a request for a real physical sample of something in the generated and displayed 3D image of the room with furnishings or architectural components or improvements; and

physically providing the requested sample to the interior designer for physical inspection outside of the displayed perspective view image.

33. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 32

wherein the fifth communicating is of a request for a fabric or carpet swatch; and

wherein the physically providing is of the requested swatch.

34. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 32

wherein the fifth communicating is of a request for a paint or stain color sample; and

wherein the physically providing is of the requested paint or stain color sample.

35. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 32

wherein the fifth communicating is of a request for a wallpaper sample; and

wherein the physically providing is of the requested wallpaper sample.

36. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 32 that, after the fourth communicating, further comprises:

making [the] <u>a</u> real product <u>in accordance with the image</u> depicted by the (7a) 3D furnishing <u>or architectural component or improvement</u> model, which <u>product</u> has, until acceptance of the order <u>and the making</u>, never existed [save] <u>in the real world</u>, <u>and has only been represented</u> as a virtual image.

37. (Presently Amended) An interactive method of promoting and selling real-world objects comprising:

originating at a server upon a digital communications network

- (1) a first plurality of 2D images depicting real-world 3D scenes,
- (2) a second plurality of 2D images depicting real-world 3D objects,
- (3) a third plurality of 2D icons corresponding to the second plurality of 2D images depicting real-world 3D objects,
- (4) a fourth plurality of 3D models corresponding to the 3D scenes that are depicted within first plurality of 2D images of real-world 3D spaces,
- (5) a fifth plurality of 3D models corresponding to the 3D objects that are depicted within a second plurality of 2D images of real-world 3D objects, and
 - (6) a sixth plurality of object-based rules;

first communicating from the server upon a digital communications network to a client the (1) first plurality of 2D images of a real-world 3D space, the (2) second plurality of 2D images of real-world 3D objects, and the (3) third plurality of 2D icons corresponding to the second plurality of 2D images of real-world 3D objects;

selecting at the client a (1a) selected real-world 2D scene image from among the (1) first plurality of 2D scene images, and a (3a) selected 2D icon from among the (3) third plurality of 2D icons which (3a) selected 2D icon does correspond to a (2a) selected 2D object image from among the (2) second plurality of 2D object images;

sizing and placing at the client the (3a) selected 2D icon within the (1a) selected real-world 2D scene image;

second communicating from the client upon the digital communications network to the server the sized and placed (3a) selected 2D icon within the (1a) selected real-world 2D scene image;

selecting at the server from among the (4) fourth plurality of 3D models a (4a) 3D model of the real-world scene corresponding to the (1a) selected real-world 2D scene image, and from the (5) fifth plurality of 3D models a (5a) 3D model of the real-world 3D object;

generating at the server from the (4a) 3D model of the real-world space, the (5a) 3D model of the real-world object, and the (6) plurality of object-based rules, a (7) perspective view image of a (7a) 3D real-world object corresponding to the (3a) selected icon properly located and oriented within a (7b) 3D real-world scene corresponding to the (1a) selected real-world 2D scene image, this static perspective view image being proper and accurate and internally consistent in each of scene lighting, camera location and orientation, and camera lens parameters; and

third communicating from the server upon the digital communications network to the client the generated (7) perspective view <u>image</u>;

wherein from this third-communicated (7) perspective view image the (7a) 3D real-world object properly located and oriented within the (7b) 3D real-world scene may be observed at the client; and

fourth communicating from the client upon the digital communications network to the server a sales order to physically provide a real specimen of the (7a) 3D real-world object;

wherein obtaining the sales order for the (7a) 3D real-world object is promoted by the (7) perspective view <u>image</u> showing at the client the (7a) 3D real-world object properly located and oriented within the (7b) 3D real-world scene.

38. (Presently Amended) The interactive method for selling real-world objects according to claim 37 exercised for the purpose of selling furnishings or architectural components or improvements wherein

the originating at a server is of (1) a first plurality of 2D images depicting rooms, (2) a second plurality of 2D images depicting furnishings or architectural components or improvements, (3) a third plurality of icons corresponding to the second plurality of furnishing images, (4) a fourth plurality of 3D models corresponding to the rooms that are depicted within first plurality of 2D room images, (5) a fifth plurality of 3D models corresponding to the furnishings or architectural components or improvements that are depicted within second plurality of 2D furnishing or architectural component or improvement images, and (6) a sixth plurality of rules regarding how furnishings or architectural components or improvements fit within rooms;

the first communicating from the server upon a digital communications network to the client is of (1) the first plurality of 2D room images, (2) the second plurality of 2D furnishing images, and (3) the third plurality of furnishings or architectural components or improvements icons;

the selecting at the client is of a (1a) selected real-world 2D room image from among the (1) first plurality of room images, and

(3a) a selected furnishing or architectural component or improvement icon from among the (3) third plurality of furnishing or architectural component or improvement icons, which (3a) selected furnishing or architectural component or improvement icon does correspond to (2a) a selected furnishing or architectural component or improvement image from among the (2) second plurality of furnishing or architectural component or improvement images;

the sizing and placing at the client is of the (3a) selected furnishing or architectural component or improvement icon within the (1a) selected 2D room image;

the second communicating from the client upon the digital communications network to the server is of the sized and placed (3a) selected furnishing or architectural component or improvement icon within the (1a) selected 2D room image;

the selecting at the server from among the (4) fourth plurality of 3D models is of a (4a) 3D model of the room corresponding to the (1a) selected 2D room image, and from the (5) fifth plurality of 3D models a (5a) 3D model of the furnishing or architectural component or improvement corresponding to the (3a) selected furnishing or architectural component or improvement icon;

the generating at the server from the (4a) 3D room model, the (5a) 3D furnishing or architectural component or improvement model and the (6) plurality of furnishing or architectural component or improvement rules, is of a (7) static perspective view image of a (7a) 3D furnishing or architectural component or improvement corresponding to the (3a) selected furnishing or architectural component or improvement icon properly located and oriented within a (7b) 3D room corresponding to the (1a) selected 2D room image; and

the third communicating from the server upon the digital communications network to the client is of the generated (7) static perspective view <u>image</u>;

wherein from this third-communicated (7) static perspective view <u>image</u> the (7a) 3D <u>furnishing or architectural component or improvement</u> properly located and oriented within the (7b) 3D room may be observed at the client; and

the fourth communicating from the client upon the digital communications network to the server is of a sales order to physically provide a real specimen of the (7a) 3D furnishing or architectural component or improvement;

wherein obtaining the sales order for the (7a) 3D furnishing or architectural component or improvement is promoted by the (7) static perspective view <u>image</u> showing at the client the (7a) 3D furnishing or architectural component or improvement properly located and oriented within the (7b) 3D room.

- 39. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 37 wherein at least one of the server's first, second, third and fifth pluralities is proprietary.
- 40. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 39

wherein all of the server's first, second, third and fifth pluralities are proprietary.

41. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 39 further comprising:

wherein the originating at a server is further of (8) a set of available lighting effects including realistic lighting and shadows;

wherein the first communicating from the server upon a digital communications network to the client is further of the (8) set of available lighting effects;

wherein the selecting at the client is further of a (8a) selected lighting effect from among the (8) set of lighting effects;

wherein the second communicating from the client upon the digital communications network to the server is further of the (8a) selected lighting effect;

wherein the generating at the server is further of the (7) static perspective view <u>image</u> as illuminated by the (8a) selected lighting effect; and

wherein the third communicating from the server upon the digital communications network to the client is of the generated (7) static perspective view <u>image</u> as illuminated by the (8a) selected lighting effect.

42. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 41

43. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 39 further comprising:

wherein the originating at a server is further of (9) a set of available textures and colors;

wherein the first communicating from the server upon a digital communications network to the client is further of the (9) set of available textures and colors;

wherein the selecting at the client is further of a (9a) selected textures and colors from among the (9) set of textures and colors;

wherein the second communicating from the client upon the digital communications network to the server is further of the (9a) selected textures and colors;

wherein the generating at the server is further of the (7) static perspective view <u>image</u> as textured and colored by the (8a) selected textures and colors; and

wherein the third communicating from the server upon the digital communications network to the client is of the generated (7) static perspective view <u>image</u> as textured and colored by the (8a) selected textures and colors.

44. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 43

wherein the selecting is performed by an interior designer at the client.

45. (Presently Amended) The furnishings <u>or architectural</u> components or improvements sales method according to claim 43

wherein the image generation system produces a 2D virtual image of the room where all textures are scaled and oriented to the three-dimensional objects in which the textures appear.

46. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 39

wherein the selecting is performed by an interior designer at the client.

47. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 45 that, between the third communicating and the fourth communicating, further comprises:

fifth communicating upon the digital communications network from the interior designer at the client to the server a request for a real physical sample of something in the generated and displayed 3D image of the room with furnishings or architectural components or improvements; and

physically providing the requested sample to the interior designer.

48. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 47

wherein the fifth communicating is of a request for a fabric or carpet swatch; and

wherein the physically providing is of the requested swatch.

49. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 47

wherein the fifth communicating is of a request for a paint or stain color sample; and

wherein the physically providing is of the requested paint or stain color sample.

50. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 47

wherein the fifth communicating is of a request for a wallpaper sample; and

wherein the physically providing is of the requested wallpaper sample.

51. (Presently Amended) The interactive method for selling furnishings or architectural components or improvements according to claim 39 that, after the fourth communicating, further comprises:

making [the] <u>a</u> real product <u>in accordance with the image</u> depicted by the (7a) 3D furnishing <u>or architectural component or improvement</u> model, which <u>product</u> has, until acceptance of the

order <u>and the making</u>, never existed [save] <u>in the real world</u>, <u>and has only been represented</u> as a virtual image.